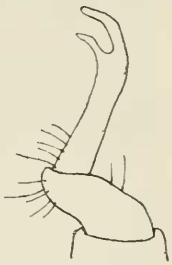
In the female the ventral area of the third segment is raised behind the sternal piece to which the legs are articulated, into a convexly margined plate. In the male the distal segment of the copulatory organ arises on the inner surface of the apex of the basal segment, and is curved inwards to meet its fellow of the opposite side, the two then running forwards closely in contact with each other, the apex being curled ventrally and very slightly bifid.

(3) *Cylindrodesmus villosus*, sp. n.

Colour of adult a pale yellowish brown, the sixth segment of the antennæ infuscate; the forehead darker than the lower part of the head.



The female of this species differs in scarcely anything, so far as I have noticed, from *C. hirsutus*; but the male may be at once recognized from the male of *hirsutus* and of *Strubelli* by the form of the copulatory organ, which ends in two subsimilar ventrally turned branches, of which the proximal is much shorter than the distal.

Length of female up to 5·5 millim.

The males of the three known species may be recognized as follows:—

a. Apex of copulatory organ simple or very slightly divided; length 7–8 millim.
  *a*¹. Apex of the copulatory organ bent ventrally and weakly bifid ..... *hirsutus*, Poc. (Christmas Island.)
  *b*¹. Apex of copulatory organ undivided and bent dorsally ..... *Strubelli* (Verh.). (Amboina.)
b. Copulatory organ ending distally in two subsimilar branches directed ventrally; length up to 5½ millim. ..... *villosus*, sp. n. (Rotuma.)

LIV.—*On a new Genus of Salmonoid Fishes from the Altai Mountains.* By G. A. Boulenger, F.R.S.

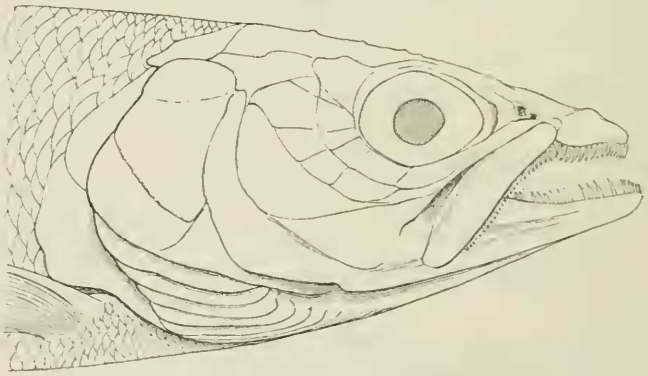
A single example of a remarkable Salmonoid from the south side of the Altai Mountains, on Chinese territory, was brought home by Mr. St. George Littledale from his recent expedition, and presented by him to the British Museum. The specimen was unfortunately dried, and reached the

Museum in a mummified condition; but I have succeeded by careful soaking in restoring its appearance to a certain extent and rendering it fit for description. It is now preserved in spirit. It must be made the type of a new genus, which I propose to call

Phylogephyra.

Mouth large, both jaws equal in front, the lower articulating with the suspensorium just behind the vertical of the orbit. Teeth strong, curved, close together, in one row in the præmaxillary, maxillary, and mandible, in a large cardiform patch on the head of the vomer, in another on the tongue, and in two series on the palatines. Branchiostegals 11. Dorsal rather elongate, with 20 rays, the four anterior adnate and unbranched; anal moderate, with 15 rays, the three anterior adnate and unbranched. Scales moderate. Anterior ribs with epipleurals.

Phylogephyra altaica.



Side view of head, natural size.

Depth of body 5 times in total length, length of head $3\frac{3}{4}$ times. Snout rounded, not projecting, $1\frac{1}{2}$ diameter of eye, which is 5 times in length of head and $1\frac{1}{4}$ in interorbital width; maxillary 4 times as long as deep, $2\frac{3}{4}$ in length of head, extending to below posterior third of eye; supplemental maxillary small. Gill-rakers moderately long, slender, 11 on lower part of anterior arch. Dorsal equally distant from the end of the snout and the base of the caudal, its length equal to $\frac{2}{3}$ that of the head, the longest rays $\frac{1}{2}$ the latter length. Adipose fin small, more than twice as far from the dorsal

than from the base of the caudal. Pectorals $\frac{3}{5}$ length of head. Ventrals inserted below posterior third of anal. Base of anal $\frac{1}{2}$ that of dorsal. Caudal forked, scaly. Caudal peduncle twice as long as deep. Lateral line straight, along 72 scales, separated from the dorsal by 8 rows of scales.

Total length 290 millim.

The name chosen for this genus is intended to express the important fact that it completely bridges over the gap believed to exist at the present day between the two groups usually designated as Salmoninæ and Coregoninæ. Whilst agreeing with the former in the large mouth with long and narrow maxillary, the strong and complete dentition, and the mandibular articulation behind the vertical of the orbit, it conforms to the second as regards the other characters, and approaches the genus *Thymallus* in particular—so much so, that I have even for a moment entertained doubts as to the fish here described being distinct from Kessler's *Thymallus brevirostris*, from the same district, and which is also stated to differ from the typical *Thymallus* in the longer maxillary bone, nearly reaching to below the posterior border of the eye. However, nothing is said of the dentition of this *T. brevirostris*, an omission which, on the part of so able an ichthyologist as the late Dr. Kessler, implies practical identity with the species to which it is compared, and the shape of the snout and the number of anal rays (11–12) also point to specific difference. It is, however, probable that an examination of *T. brevirostris* would show a certain approximation to the fish here described, and supply a further link in the chain connecting the extreme types of Salmonoids.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

November 3rd, 1897.—Dr. Henry Hicks, F.R.S., President, in the Chair.

Mr. W. W. Watts proceeded to give details of some interesting geological features recently exposed at the new Sewerage Works at Carshalton, Surrey, now being made by the Urban District Council, to which the attention of the Society had been directed by the Surveyor during the autumn recess.

These excavations are situated at a spot which on the Geological Survey map is coloured as London Clay; and the features of the ground fully justified this colouring. The excavations, however, have shown that there are loamy and sandy beds of a light yellow